

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/616,395	07/09/2003	Russell A. Gaudiana	8577-DIV	9804	
7590 05/05/2004		,	EXAM	EXAMINER	
POLAROID CORPORATION			РНАМ, Е	PHAM, HAI CHI	
Patent Department 1265 Main Street			ART UNIT	PAPER NUMBER	
Waltham, MA 02451			2861		
			DATE MAILED: 05/05/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

		\mathcal{N}				
	Application No.	Applicant(s)				
	10/616,395	GAUDIANA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Hai C Pham	2861				
The MAILING DATE of this communication	appears on the cover sheet w	vith the correspondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by stany reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a reply within the statutory minimum of th riod will apply and will expire SIX (6) MO atute, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on _	Responsive to communication(s) filed on					
<i>,</i> —	This action is non-final.					
3) Since this application is in condition for allo						
closed in accordance with the practice und	er <i>Ex parte Quayle</i> , 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) <u>1,2,4,5,9 and 10</u> is/are pending in	the application.					
4a) Of the above claim(s) is/are with	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1,2,4,5 and 10</u> is/are rejected.						
7)⊠ Claim(s) <u>9</u> is/are objected to.						
8) Claim(s) are subject to restriction ar	nd/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Exan						
10)⊠ The drawing(s) filed on <u>09 July 2003</u> is/are:	a) accepted or b) ⊠obje	cted to by the Examiner.				
Applicant may not request that any objection to	-···					
Replacement drawing sheet(s) including the co						
11)☐ The oath or declaration is objected to by the	e Examiner. Note the attach	ed Office Action or form P1O-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for force a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the application from the International Bu * See the attached detailed Office action for a	nents have been received. nents have been received in priority documents have bee reau (PCT Rule 17.2(a)).	Application No n received in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892)		Summary (PTO-413)				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SE 	, <u> </u>	o(s)/Mail Date Informal Patent Application (PTO-152)				
Paper No(s)/Mail Date <u>07/09/03</u> .	6) Other:					

Art Unit: 2861

DETAILED ACTION

Drawings

- 1. The drawings are objected to because:
 - In Figure 7, the labels "OLED Element" and "Color Filter" are shown pointed to the same element, which is actually the color filter layer.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2861

3. Claims 1, 4-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Eida et al. (U.S. 6,344,712).

Eida et al. discloses an organic electroluminescent device (Fig. 1) capable of preventing color mixing for use as a light source of a printer head (col. 1, lines 6-11), the device comprising a substantively transparent substrate (1) having a substantially planar light receiving surface oppositely spaced apart from and substantively parallel to a substantially planar light emitting surface, an Organic Light Emitting Diode (OLED) structure, said structure comprising at least one of a plurality of triplets of elongated array of individually addressable Organic Light Emitting Diode (OLED) elements (3), said Organic Light Emitting Diode (OLED) structure being deposited onto and in effective light transmission relation to the light receiving surface of said substrate, wherein said OLED elements emit light over a broad range of wavelengths, any said OLED element in said at least one array has a characteristic surface dimension which is substantially the same for all OLED elements in the array and from which an OLED center point can be defined (Fig. 1a), and at least one of a plurality of triplets of elongated arrays of color filter elements (planar color modulating layers or color filters 22), said color filter elements selectively transmitting radiation in a distinct range of wavelengths (providing a multi-color display), having a substantially planar color filter light receiving surface oppositely spaced apart from and substantively parallel to a substantially planar color filter light emitting surface, any color filter element in the array has a characteristic surface dimension which is substantially the same for all color filter elements in the array and from which a center point can be defined, said color filter

Art Unit: 2861

being formed from at least one color filter material, said at least one color filter material to form said at least one elongated color filter array being deposited onto and in effective light transmission relation to the light emitting surface of said substrate, and wherein the color filter center points for any said color filter array being substantially collinear and aligned with the respective OLED center points for the OLED array located in effective light transmission relation to that color filter array, and wherein each OLED array in the triplets is in effective light transmission relation to the light receiving surface of one color filter array in the triplet thereby constituting an OLED-Color filter array set (the color modulating layers or color filters 22 being disposed on the light transmitting surface of the transparent planar substrate 1 in alignment with the corresponding organic EL luminescent layers 3).

Page 4

Eida et al. further teaches:

- the color filter material being an imageable material (col. 12, lines 15-17),
- the color filter material being a colorant (pigment) (col. 11, lines 44-49), every said color filter element further comprising a region (shading layers 21) substantially adjoining the entire periphery of said color filter element, and said region substantively absorbing radiation in all three distinct wavelength ranges, each said distinct wavelength range being associated with a color filter in a said triplet (col. 3, lines 40-47).

Art Unit: 2861

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eida et al. in view of Huang et al. (U.S. 5,929,474).

Eida et al. discloses all the basic limitations of the claimed invention except for the driver control circuits and means of electrically connecting selected ones of the OLEDs.

However, it is old and well known in the art that OLED array type light source is electrically connected to and independently controlled by suitable driver control circuits as evidenced by Huang et al., which discloses an active matrix OLED array wherein each of the addressable OLED elements is electrically connected to the separate row driver circuit (11) and column driver circuit (12) (Fig. 1).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the driver control circuits to drive each of the OLED elements of the device of Eida et al. since Huang et al. teaches this to be known in the art to provide suitable driver control circuits to individually drive each of the addressable OLED elements in the matrix array.

Art Unit: 2861

Allowable Subject Matter

6. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the indication of the allowability of claim 9 is the inclusion therein, in combination as currently claimed, of the limitation that "wherein said distance between the planar light emitting surface of the color filter array and the light receiving surface of photosensitive material, the distance between the light receiving surface of said substrate and the light emitting surface of said substrate, said spacing between centers of the color filters, and said characteristic surface dimension of the color filters being jointly selected so that, at a given pixel area, said pixel area corresponding to a given color filter element in a given color filter array, the exposure of said photosensitive material due to the light intensity from the elements of the given array which are adjacent to said given color filter element and from said given color filter element, is optimized", which is not found taught or fairly suggested by the prior art made of record considered alone or in combination.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

Art Unit: 2861

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

HAI PHAM
PRIMARY EXAMINER

Harzle Man

May 1, 2004